UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

SAMUEL M. ROBERTS,

Plaintiff,

-vs-

LOS ALAMOS NATIONAL SECURITY, LLC, AWE, PLC, and MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

Defendants,
Third-Party Plaintiffs,

-vs-

UNIVERSITY OF ROCHESTER,

Third-Party Defendant.

AFFIDAVIT OF SAMUEL F. B. MORSE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

Civil Case No.: 11-cv-6206(L)

STATE OF NEW YORK)
COUNTY OF MONROE) ss.:

Samuel F. B. Morse, being duly sworn, deposes and says:

1. I am employed by the University of Rochester ("University") and work at the University's Laboratory for Laser Energetics ("LLE").

2. The LLE is an internationally recognized center for research, training, and education in high-power lasers, fusion, high-energy-density physics, and electro-optics technology. The LLE has two lasers, the OMEGA laser and the OMEGA EP laser. Those lasers, together with all of their ancillary components and equipment are referred to as the Omega Laser Facility (the "Omega Facility"). The Omega Facility is the second most powerful

operating fusion laser in the world and is used to conduct a variety of ignition physics, weapons physics and basic science experiments.

3. The LLE houses the Omega Facility. The National Nuclear Security Administration of the US Department of Energy ("DOE") provides the funding for the research and operation of the Omega Facility, and DOE owns the OMEGA and OMEGA EP lasers. However, the LLE buildings and grounds are University property, and the University owns the ancillary equipment and diagnostics used in conjunction with the lasers, including the light pipe, which is at issue in this case. Further, all operation of the Omega Facility is performed solely by University personnel.

4. The LLE Director, Dr. Robert L. McCrory, is responsible for the overall management, operation and direction of the LLE. Dr. McCrory is a University employee selected by the University's President and approved by its Board of Trustees.

5. I am the Omega Facility Division Director and am responsible for oversight and operation of the Omega Facility. I report directly to Dr. McCrory.

6. Broadly speaking, the components of the OMEGA laser – the laser that was used in the experiment being conducted at the time of plaintiff's accident – include a laser bay, capacitor bays, and a target bay, which houses a target chamber. The laser bay refers to the portion of the Omega Facility containing the OMEGA laser's individual laser beamlines, that is, the equipment that produces the actual laser beams. The capacitor bay holds a series of capacitors which provide the power source for the OMEGA laser. The OMEGA laser is shot into a target chamber, which is a vacuum-sealed vessel that contains targets used in an individual experiment. The target bay refers to an area of the Omega Facility that houses the target chamber

and contains most of the experimental diagnostic instruments ("diagnostics") which collect data from experiments performed with the OMEGA laser.

7. Directly beneath the target bay is an area called "La Cave." La Cave has in it certain support systems for several diagnostics located in the target bay. A control room, from which University personnel operate the OMEGA laser, is adjacent to the target bay.

8. In addition to conducting its own experiments, the LLE permits outside researchers from other organizations to propose experiments to be conducted using the lasers and ancillary equipment in the Omega Facility.

9. The LLE has developed a process for the submission, approval and execution of all proposed experiments. This process is documented in the LLE's Laser Facility Organization & Regulation Manual (the "LFORM").

10. As set forth in the LFORM, a Facility Advisory and Scheduling Committee (the "FASC") is responsible for recommending Omega Facility time allocation, promoting an effective user community, reviewing the facility's overall effectiveness for users, and reviewing experimental proposals for compatibility and safety. Section 1003 of the LFORM, entitled "FASC Roles and Responsibilities," sets forth the role of the FASC and is attached as Exhibit 1.

11. The FASC meets annually in June to formulate and determine the general Omega Facility schedule for the next fiscal year and to evaluate the Omega Facility's performance from the previous year in the context of its scientific goals.

12. Because the full FASC only convenes once a year, review and approval of individual experiment proposals is delegated to a group called the FASC Subcommittee. The FASC Subcommittee is composed of the LLE members of the FASC, including the Laser Facility Manager, the Experimental Operations Group Leader, the Experimental Division

Director, the Engineering Division Director, the Laboratory Safety Officer, the Omega Experiments Group Leader, the NLUF Manager, the Laser System Scientist and me (the OMEGA Facility Division Director). All of the members of the FASC Subcommittee are University employees. The FASC Subcommittee meets bi-weekly to, among other things, administer the Omega Facility schedule and to review, and ultimately approve if appropriate, proposed experiments. Exhibit 1, § 1003.1.3

13. To propose an experiment, a researcher – commonly referred to as the lead principal investigator – submits an experiment proposal. This experiment proposal is an electronic document and contains a summary of the proposed experiment's objectives and provides an abbreviated description of the laser and diagnostic requirements and the type and number of targets. See § 1004.2 of the applicable portion of the LFORM, entitled "Experimental Proposals and Principal Investigator Roles and Responsibilities, Experimental Proposal," attached as Exhibit 2.

14. The proposal template has a hyperlink to another required submission, known as Shot Request Forms (SRFs). The SRFs contain detailed scientific information about the experiment, including technical specifications for the OMEGA laser and its drivers, as well as specific information about the diagnostics and targets the principal investigator wishes to use. Together with the experiment proposal template, the lead principal investigator provides sample SRFs for every unique configuration planned for the shot day. See Exhibit 2. The FASC Subcommittee reviews the proposal template and the sample SRFs for system and experimental compatibility and safety, and approves or recommends changes to each proposal, as appropriate.

15. In the event a proposal is not approved or a change in the protocol is required by the FASC subcommittee, a principal investigator may appeal the decision to the LLE Director, who has final authority for all experiment proposals.

16. Once the FASC Subcommittee approves a proposed experiment, the lead principal investigator reviews the shot plan and sample SRFs with the Omega Facility managers (who are University employees). After this review, the lead principal investigator submits a full SRF for each shot. Exhibit 2, § 1004.3.

17. During this process, the lead principal investigator may identify additional researchers as principal investigators on the SRFs because those individuals have specific or specialized knowledge about diagnostics to be used, or as a mechanism to give them access to data collected in the experiment. These additional researchers are known as "secondary principal investigators."

18. The experiment that was under way on August 6, 2008 when the accident that injured plaintiff occurred was part of a multi-year experimental campaign known as "DT Ratio." This experimental campaign first was proposed in 2006 by Dr. Hans Herrmann, a research scientist at Los Alamos, and the first implementation of the experiment had taken place in June 2007.

19. On June 17, 2008, Dr. Herrmann submitted an experiment proposal together with the corresponding sample SRFs for continuation of the DT Ratio campaign. The experiment proposal is attached at Exhibit 3.

20. On June 19, 2008, the FASC Subcommittee reviewed and approved the forms submitted by Dr. Herrmann and accepted the experiment and target shots, which were planned for August 6, 2008. A copy of the FASC Subcommittee's approval is attached at Exhibit 4. As

noted above, all of the individuals who reviewed and approved Dr. Herrmann's experiment proposal were University employees.

21. Thereafter, Dr. Herrmann met with the Omega Facility Manager, reviewed the experiment and ultimately submitted detailed SRFs. Copies of the SRFs for the shots that were conducted August 6, 2008 are attached as Exhibit 5. On the SRFs, Dr. Herrmann identified four other individuals as secondary principal investigators for the shots to be conducted. Those individuals were Dr. Vladimir Glebov, a University employee, Dr. Colin Horsfield, an employee of AWE, PLC, Dr. Johan Frenje, an employee of Massachusetts Institute of Technology ("MIT"), and Dr. George Kyrala, another employee of Los Alamos.

22. As set forth in Dr. Glebov's affidavit, Dr. Glebov was included as a principal investigator because of his expertise in and responsibility for neutron diagnostics that Dr. Herrmann had listed for use during the shots for the experiment campaign. The remaining individuals from AWE, Los Alamos and MIT were identified as principal investigators because they desired access to the data being collected, and Dr. Hermann granted that access.

23. All shots at the Omega Facility are performed under the direction and control of a group called the Omega Facility Watch Organization (the "Watch Organization"). The Watch Organization is responsible for safety, shot execution and data collection. The members of the Watch Organization, called Watchstanders, are the operators and technicians who actually control the OMEGA laser and its ancillary systems during shot operations. All Watchstanders must complete a rigorous qualification process and all of them must be University employees. Section 1005 of the LFORM, entitled "Laser Facility Operations Overview," Section 2000 of the LFORM, entitled "Watch Conditions" and Section 2001 of the LFORM, entitled "Shot Director (SD)," are attached at Exhibit 6.

24. The Shot Director is the senior Watchstander. In August 2008, the Shot Director reported directly to the Laser Facility Manager, who reported to me. The Shot Director is in charge of the overall laser and target systems during a shot and has the power to abort a shot or an entire series of shots if personnel or equipment safety issues arise. Exhibit 6, § 2001. There is always a Shot Director, twenty-four hours per day, seven days per week, either on station or on call. (A Shot Director would be on call when, for example the Omega Facility is closed.) Although the individual serving as the Shot Director can vary from experiment to experiment, or vary from day to day, he is always a University employee.

25. Principal investigators are never part of the Watch Organization. Although they may advise and consult with the Shot Director or Watchstanders concerning the scientific details of the experiment, the Shot Director retains complete control over the operation of the lasers and all ancillary equipment at all times, whether there is an experiment under way, maintenance under way, and even when the Omega Facility is not operating or closed.

26. None of the defendants had any right or authority to conduct an experiment at LLE, nor change or modify the experiment, even as it was ongoing, without approval of LLE (University-employed) personnel. Likewise, none of the defendants had the right or authority to operate or to direct the operation of any aspect of the Omega Facility at any time.

27. None of the defendants had any right or authority to direct the activities of any University personnel, including plaintiff. As plaintiff's employer, the University paid plaintiff's

salary and benefits, and had the exclusive right and sole discretion to set his work schedule, direct and control his work, furnish any equipment he might use in his job and, ultimately, if it so chose, terminate his employment.

s/ Samuel F. B. Morse

Samuel F. B. Morse

Sworn to before me this

29th day of August, 2012

s/ Sarah J. Frasier

Notary Public